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EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,773

Applicant(s)

PENNEC ET AL.

Examiner

Christian La Forgia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The amendment filed on 28 June 2004 is noted and made of record.
2. Claims 1-17 have been presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.
4. See further rejections that follow.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner would like to point out that where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). In addition, the Applicant fails to meet the requirements of redefining a term as set forth in the MPEP § 2106. In order to define/redefine a term, the Applicant must do so “with reasonable clarity, deliberateness, and precision” and must “set out his uncommon definition in some manner within the patent disclosure’ so as to give one of ordinary skill in the art notice of the change” in meaning. The term “certificate” in claims 1-19

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is used by the claim to mean, “an identifier to indicate that a file is virus-free”, while the accepted meaning is “An attachment to an electronic message used for security purposes. The most common use of a digital certificate is to verify that a user sending a message is who he or she claims to be, and to provide the receiver with the means to encode a reply.” The term is indefinite because the specification does not clearly redefine the term.

7. Claims 13-17 provide for the use of the method of claim 1, but, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

8. Claims 13-17 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1, 4, 6-8, 10, and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,154,844 to Touboul et al., hereinafter Touboul, in view of U.S. Patent No. 6,094,731 to Waldin et al., hereinafter Waldin, and in further view of U.S. Patent 5,699,431 to Van Oorschot et al., hereinafter Van Oorschot.

11. As per claims 1 and 13-17, Touboul et al. teaches a method comprising the steps of:

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employing a firewall in controlling and filtering using a certificate (i.e. inspector, Figure 1 [blocks 100, 110]) including:

receiving a file (Figure 7 [block 705]);

if a certificate is required for the file, determining whether the a certificate is already associated with the file (Figure 7 [block 720]);

if a certificate is already associated with the file, authenticating the associated certificate (Figure 7 [block 725]),

if the certificate is authenticated, determining whether the file is virus-free or not (figure 7, step 755 and column 10, lines 2-13);

if the file is virus-free, forwarding the file with the associated certificate (Figure 7 [blocks 760, 770]);

if the certificate is not authenticated or if no virus-free certificate is associated with the file determining whether the file is virus-free or not (Figures 6 [block 625], 7 [blocks 720, 745, 750], column 9, lines 63-65, column 8, lines 51-55);

if the file is virus-free , associating with the file a new certificate, and forwarding the file with the new certificate (Figures 6 [block 635], 7 [blocks 750, 770], column 9, lines 63-65).

12. Touboul does not teach a virus-free certificate.

13. Waldin discloses certifying a file is virus free (column 6, lines 10-15).

14. It would have been obvious to one of ordinary skill in the art as the time the invention was made to certify a file as virus-free, since Waldin discloses at column 2, line 54 to column 3, line 4 that such a modification would eliminate redundant scanning for at least some computers, thereby allocating more system resources.

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15. Touboul does not teach that the virus-free certificate comprises a certificate signature.

However, including a certificate signature within a certificate is old and well known in the art as shown by Van Oorschot (column 1, lines 30-47).

16. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the system of Touboul et al. with the teachings of Van Oorschot to include a certificate signature within the certificate, since Van Oorschot states at column 1, lines 39-45 that such a modification would provide reasonable assurance that the certificate is authentic.

17. Regarding claim 4, Touboul teaches that the virus-free certificate comprises a file signature (i.e. Downloadable ID) (figure 2, item 220) for determining that the file is virus-free.

18. Regarding claim 6, Touboul teaches that the virus-free certificate further comprises at least one of the following:

- a file identification;

- a virus-free certificate authority identification;

- a public key for decrypting the file signature;

- a signature for authenticating the virus-free certificate; and

- an indication of the virus-free certificate validity (column 6, lines 10-13).

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19. Regarding claim 7, Touboul teaches that the step of determining whether the file is virus-free or not includes:

- decrypting the file signature (i.e. Downloadable ID) using a public key comprised in the virus-free certificate (column 7, lines 53-55), (column 9, lines 36-41);

- hashing the file to generate a file digest; and comparing the decrypted file signature with the generated file digest (column 7, lines 56-60), (column 9, lines 41-52).

20. Regarding claim 8, Touboul teaches that step of determining whether the file is virus-free or not (figure 7, step 755) comprises the further step of

if the file is not virus-free (“NO” branch on figure 7, step 760), discarding the file (figure 7, step 765).

21. Regards claim 10, Touboul teaches that the step of associating with the file a new virus-free certificate (figure 6, step 635) includes the step of requesting a virus-free certificate (i.e. sending file to inspector, figure 6, step 620) from a virus-free certificate authority (i.e. inspector). The Examiner infers that the step of requesting a certificate is implied in the action of sending a file to the inspector.

22. Regarding claim 12, Touboul teaches updating a cache (i.e. data storage device) (figure 2, item 330) with a new virus-free certificate (i.e. signed downloadable) (figure 2, item 150).

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23. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Touboul in view of Waldin as applied to claim 1 above, and in further view of Van Oorschot in further view of U.S. Patent 6,092,194 to Touboul et al., hereinafter Touboul2.

24. In regards to claim 2, the combination of Touboul, Waldin, and Van Oorschot teaches the system of claim 1 as discussed above.

25. The combination of Touboul, Waldin, and Van Oorschot do not teach the steps of:

identifying the file in a table, said table comprising for each identified file at least one anti-virus criteria;

referring to the table and retrieving at least one of said at least one anti-virus criteria;; and
determining from said at least one anti-virus criteria whether a virus-free certificate is required for the file or not.

26. Touboul2 discloses a system for protecting a computer and a network from hostile downloadables (column 1, lines 25-27).

27. Touboul2 teaches the steps of identifying the file (i.e. downloadable) in a table (i.e. security database) (figure 2, item 240), said table comprising for each identified file at least one anti-virus criteria (i.e. security policy) (figure 6A, step 606);

referring to the table and retrieving at least one anti-virus criteria (figure 6B, item 654),
and

determining from that anti-virus criteria whether a virus-free certificate is required for the file or not (figure 6A, step 620).

28. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the system of Touboul, Waldin, and Van Oorschot with the

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teachings of Touboul2 to include the steps of identifying the file in a table, said table comprising for each identified file at least one anti-virus criteria; referring to the table and retrieving at least one of said at least one anti-virus criteria, and determining from said at least one anti-virus criteria whether a virus-free certificate is required for the file or not, since Touboul2 states at column 2, lines 35-37 that such a modification would enable the system to allow or block downloadables according to the information stored in the table.

29. In regards to claim 3, the combination of Touboul, Waldin, and Van Oorschot do not teach that the step of referring to the table and retrieving at least one anti-virus criteria includes the step of determining whether or not the file satisfies the requirements of the anti-virus criteria.

30. Touboul2 teaches that the step of referring to the table and retrieving at least one anti-virus criteria includes the step of determining whether or not the file satisfies the requirements of the anti-virus criteria (figure 6C, step 664).

31. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the system of Touboul, Waldin, and Van Oorschot with the teachings of Touboul2 to include that the step of referring to the table and retrieving at least one anti-virus criteria includes the step of determining whether or not the file satisfies the requirements of the anti-virus criteria, since Touboul2 states at column 2, lines 35-37 that such a modification would enable the system to allow or block downloadables according to the information stored in the table.

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32. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Touboul in view of Waldin as applied to claim 1, and in further view of Van Oorschot in further view of U.S. Patent 6,275,937 to Hailpern et al., hereinafter Hailpern.

33. In regards to claim 5, Touboul, Waldin, and Van Oorschot teach the system of claim 1 as discussed above.

34. Touboul, Waldin, and Van Oorschot do not teach that the virus-free certificate further comprises a list of the anti-virus programs that have been executed on the file.

35. Hailpern discloses a collaborative method of virus checking data object in a network of servers (column 1, lines 25-27).

36. Hailpern discloses a certificate (i.e. listing of the results of applying anti-virus checking) (column 13, line 29) comprising a list of the anti-virus programs that have been executed on a file (column 13, lines 30-36).

37. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Touboul, Waldin, and Van Oorschot with the teachings of Hailpern to include that the virus-free certificate further comprises a list of the anti-virus programs that have been executed on the file, since Hailpern discloses at column 3, lines 65-66 that such a modification would establish a collaborative method for processing the files.

38. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Touboul in view of Waldin in view of Van Oorschot in view of Hailpern as applied to claim 1 above, and in further view of U.S. Patent 5,781,629 to Haber et al., hereinafter Haber.

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39. Regarding claim 9, the combination Touboul, Waldin, and Van Oorschot teaches the system of claim 1 as discussed above. The combination Touboul and Van Oorschot as modified by Hailpern includes a certificate comprising a list of at least one anti-virus programs that have been executed on the file, as discussed for claim 5 above. The combination Touboul, Van Oorschot and Hailpern as modified by Touboul includes a table comprising for each file at least one anti-virus criteria, as discussed for claim 2 above.

40. Touboul and Van Oorschot also teach that the step of authenticating the virus-free certificate may include validating the virus-free certificate (see Touboul, column 6, line 11 and Van Oorschot, column 1, lines 50-53).

41. The combination Touboul, Van Oorschot, Hailpern and Touboul, however, does not teach that the step of authenticating the virus-free certificate also includes:

42. Verifying the list of anti-virus programs comprised in the certificate against the list of anti-virus programs associated with the file in the table.

43. Haber teaches authenticating a list of documents (i.e. anti-virus programs) by verifying them against a list of documents registered on a table (i.e. at a later time, together with a collection of documents to be authenticated and their alleged certificates, such an authenticated list can be used to verify that (1) each of such documents is an exact copy of a respective document that was registered with the table of contents and (2) none of the documents on such list are missing) (column 12 , lines 47-52)

44. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Touboul, Van Oorschot, Hailpern and Touboul with the teachings of Haber to include that the step of authenticating the virus-free certificate also

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includes verifying the list of anti-virus programs comprised in the certificate against the list of anti-virus programs associated with the file in the table with the motivation to provide an improved method of working with digital documents (Haber, column 3, lines 53-54).

45. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Touboul in view of Waldin in view of Van Oorschot as applied to claim 1 above, in further view of U.S. Patent 6,233,577 to Ramasubramani et al., hereinafter Ramasubramani.

46. In regards to claim 11, the combination of Touboul and Van Oorschot teaches the system of claim 1 as discussed above.

47. The combination of Touboul and Van Oorschot does not teach that the step of associating with the file a new virus-free certificate includes the step of retrieving a virus-free certificate from a cache, said cache storing existing virus-free certificates.

48. Ramasubramani discloses a system for managing, in a proxy server computer, digital certificates for two-way interactive communication devices over the data networks (column 1, lines 30-32).

49. Ramasubramani teaches the step of associating with a file (i.e. user account) a new certificate by retrieving a certificate from a cache (i.e. database), said cache storing existing certificates (i.e. To minimize the latency of obtaining certificates for each of the thin client devices, the certificate management module reserves a fixed number of free certificates signed by a certificate authority and their respective private keys in a certificate database and frequently updates the free certificate according to a certificate updating message. Whenever a user account is created for a thin client device, the certificate management module fetches one or more free

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certificates from the certificate database and associate the fetched certificates to the created account and meanwhile the certificate management module creates new free certificates with the certificate authority to fill in the certificate database.) (see Abstract).

50. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Touboul and Van Oorschot with the teachings of Ramasubramani to include that the step of associating with the file a new virus-free certificate includes the step of retrieving a virus-free certificate from a cache, said cache storing existing virus-free certificates with the motivation to minimize the latency of obtaining certificates.

Claim Objections

51. Claims 8 and 12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another dependent claim [claim 8 depends from multiple dependent claim 6; claim 12 depends from multiple dependent claims 6 and 8]. See MPEP § 608.01(n). Accordingly, the claim 8 not been further treated on the merits.

Conclusion

52. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

53. The following patents are cited to further show the state of the art with respect to certifying files as virus-free, such as:

United States Patent No. 5,606,609 to Houser et al., which is cited to show electronic document verification.

United States Patent No. 6,092,194 to Touboul, which is cited to show protecting a computer and a network from hostile downloads.

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United States Patent No. 6,021,510 to Nachenberg, which is cited to show an anti-virus accelerator.

United States Patent No. 6,577,920 to Hypponen, which is cited to show computer virus screening.

54. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

55. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

56. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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